

REMARKS

The Office Action dated December 18, 2002 presents the examination of claims 1-10. No amendments are made to the application and thusly no new matter is inserted into the application.

Rejection under 35 U.S.C. § 102

The Examiner maintains the rejection of claims 1-10 under 35 U.S.C. § 102(b) for allegedly being anticipated by JP-A-7,179,556 (JP '556). Applicants respectfully traverse. Reconsideration of the claims and withdrawal of the instant rejection are respectfully requested.

As noted in the Request for Reconsideration filed on October 1, 2002, JP '556 fails to disclose the preparation of polyurethane foam because a blowing agent is not employed in the preparation thereof. On page 2 of the Office Action, the Examiner states that he is in the process of obtaining a full translation of JP '556. In the meantime, however, the Examiner asserts that foaming is either an explicit or inherent feature of the polyurethane disclosed by JP '556.

In order to answer this rejection, Applicants attach hereto a translation of JP '556 obtained from the Japanese Patent Office. As is clear from the translation, JP '556 fails to disclose or suggest a polyurethane foam. Instead, the polyurethane disclosed in JP '556 is not a polyurethane foam but rather a non-expanded polyurethane because a blowing agent is not employed therein.

For these reasons, JP '556 fails to recite all of the disclosed elements of any one of the pending claims 1-10. Therefore, the rejection is improper and must be withdrawn.

Rejection under 35 U.S.C. § 103

The Examiner rejects claims 1-10 under 35 U.S.C. § 103(a) for allegedly being obvious over by JP-A-7,179,556 (JP '556). Applicants respectfully traverse. Reconsideration of the claims and withdrawal of the instant rejection are respectfully requested.

The Examiner asserts that even if JP '556 fails to disclose foaming of the articles, it is well known in the polyurethane art to use a blowing agent for the purposes of imparting cushioning properties. Applicants respectfully disagree.

The Examiner has failed to make a *prima facie* case of obviousness. The Examiner cannot merely state that foaming the

polyurethane disclosed by JP '556 would be obvious without a reference or affidavit to support his statements. In doing so, the Examiner's rejection is contrary to the ruling of the Court of Appeals for the Federal Circuit in In re Sang Su Lee, 61 USPQ2d 1430 (Fed. Cir. 2002), wherein the court held that the USPTO could not merely rely on what is "common-knowledge and common sense" in the art to sustain a rejection under 35 U.S.C. § 103. Instead, a determination of patentability must be based on factual evidence. In the present case, the Examiner fails to provide any reasoning, evidence or support for his statement that "it is well known in the polyurethane art to use [a] blowing agent for the purpose of imparting cushioning properties." For this reason, the rejection is improper and must be withdrawn.

In any event, contrary to the Examiner's remarks, the skilled artisan would not have utilized blowing agents in the preparation of the articles disclosed in JP '556. This is because JP '556 discloses thermoplastic polyurethane, rather than polyurethane foam. Thermoplastic polyurethane is completely distinguishable from the polyurethane foam of the present invention for several reasons. In order to prove these differences, Applicants submit

herewith a copy of the relevant portions of "Polyurethane Handbook," 2nd edition.

First, the Examiner's attention is drawn to paragraph 8.2.2 Processing, on page 423 of "Polyurethane Handbook." As is clear from the disclosure therein, thermoplastic polyurethane is produced in the form of pellets by a process of injection molding, extrusion and calendering. It is noted that the thermoplastic polyurethane disclosed by JP '556 is also produced by injection molding (see, paragraph 0018 of JP '556). The thermoplastic polyurethane pellets must be dry prior to use, and moist pellets must be dried before use. Otherwise, moisture will cause the pellets to expand during use of the thermoplastic polyurethane. The preparation of pellets is described in paragraph 8.2.2.1 Preparation of the Pellets, page 423 of "Polyurethane Handbook." Nowhere in the description of thermoplastic polyurethane in the "Polyurethane Handbook" is it suggested that thermoplastic polyurethane may be foamed by a blowing agent. Instead, thermoplastic polyurethane is described as generally being supplied as a ready-to-use pellet. The skilled artisan would not be motivated to foam a ready-to-use pellet by use of a blowing agent. For this reason, thermoplastic

polyurethane is completely distinct in the art from polyurethane foam.

Second, the Examiner's attention is drawn to section 7.3 Flexible Integral Skin and RIM Materials, page 342 of "Polyurethane Handbook." In paragraph 7.3.3.1 Shoe Industry, page 348, it is disclosed that integral skin foams are widely used in the shoe industry. However, thermoplastic polyurethane is described in a section completely different from that above (see section 8.2 Thermoplastic Polyurethanes, page 421 of the "Polyurethane Handbook"), which suggests a separate status in the art.

Third, it is known in the art that thermoplastic polyurethane is an alternative material to rubber or plastics, as exemplified in column 0002 of JP '566, since thermoplastic polyurethane is a rubber-like resilient material. However, polyurethane foam cannot be used as an alternative material to rubber or plastics, since polyurethane foam does not possess the quality of rubber-like resilience.

From the above, it is clear that thermoplastic polyurethane, as disclosed in JP '566, has a different form, use, and characteristics from polyurethane foam, as recited in the instant claims. As such, the skilled artisan would in no way be directed

or motivated to foam thermoplastic polyurethane with a blowing agent. In summary, thermoplastic polyurethane is completely distinct from polyurethane foam in the art, and would not be considered interchangeable by the skilled artisan. For these reasons, the present invention is not obvious over JP '566. Withdrawal of the rejection is therefore respectfully requested.

Conclusion

Applicants respectfully submit that the above remarks fully address and overcome the rejections of record. The instant claims are now in condition for allowance. Early and favorable action by the Examiner is respectfully requested.

Should there be any outstanding matters that need to be resolved in the present application, the Examiner is respectfully requested to contact Kristi L. Rupert, Ph.D. (Reg. No. 45,702) at the telephone number below, to conduct an interview in an effort to expedite prosecution in connection with the present application.

Pursuant to the provisions of 37 C.F.R. §§ 1.17 and 1.136(a), the Applicants hereby petition for an extension of three (3) months, in which to file a reply to the Office Action. The required fee of \$930.00 is enclosed herewith.

Appl. No. 09/859,419

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to Deposit Account No. 02-2448 for any additional fees required under 37 C.F.R. §§ 1.16 or 1.17; particularly, extension of time fees.

Respectfully submitted,

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By 

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Attachments: Full Translation of JP '566
Relevant portions of "Polyurethane Handbook"